

Please type a plus sign (+) inside this box → ☐

FEB 25 2002

COPY OF PAPERS  
ORIGINALLY FILED

PTO/SB/088 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office-U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

3

of

5

## Complete if Known

Application Number	09/823,657
Filing Date	March 30, 2001
First Named Inventor	Welch, William J.
Group Art Unit	1623 1627
Examiner Name	Louise N. Leary
Attorney Docket Number	02307E-065021US

## U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
LL	AA	6,270,954	B1	Welch, et al.	8/01	
LL	AB	5,276,059		Caughey, et al.	1/4/94	
LL	AC	5,900,360		Welch, et al.	5/4/99	

## FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>2</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	AD							
	AE							
	AF							

## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
LL	AG	Back, et al., Increased Thermal Stability of Proteins in the Presence of Sugars and Polyols, <i>Biochemistry</i> , 18:5191-5196 (1979)	
LL	AH	Bilsky, et al., Osmotic Reversal of Temperature Sensitivity in Escherichia coli, <i>Journal of Bacteriology</i> 113:76-81 (1973)	
LL	AI	Brown, et al., Correcting Temperature-sensitive Protein Folding Defects, <i>J. Clin. Invest.</i> , 99:1432-1444 (1997)	
LL	AJ	Brown, et al., Chemical chaperones correct the mutant phenotype of the ΔF508 cystic fibrosis transmembrane conductance regulator protein, <i>Cell Stress &amp; Chaperones</i> , 1 (2), 117-125 (1996)	
LL	AK	Burg, Molecular basis of osmotic regulation, Walter B. Cannon Lecture, <i>American Physiological Society</i> F983-F996, (1995)	
LL	AL	Bychkova, et al., Folding intermediates are involved in genetic diseases?, <i>Federation of European Biochemical Societies</i> , 359:6-8 (1995)	
LL	AM	Cheng, et al., Functional activation of the cystic fibrosis trafficking mutant ΔF508-CFTR by overexpression, <i>American Physiological Society</i> , L615-L624 (1995)	

Examiner Signature

*Louise N. Leary*

Date Considered

5/02

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.  
SF 1316416 v1

Please type a plus sign (+) inside this box →

+



COPY OF PAPERS  
ORIGINALLY FILED

PTO/SB/088 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete If Known

Application Number	09/823,857
Filing Date	March 30, 2001
First Named Inventor	Welch, William J.
Group Art Unit	1023 1627
Examiner Name	Louise N. Leary
Attorney Docket Number	02307E-065021US

Sheet 4 of 5

LL	AN	Chowdary, <i>et al.</i> , Accumulation of p53 in a Mutant Cell Line Defective in the Ubiquitin Pathway, <i>Molecular and Cellular Biology</i> , 14:1997-2003 (1994)	
LL	AO	Denning, <i>et al.</i> , Processing of mutant cystic fibrosis transmembrane conductance regulator is temperature-sensitive, <i>Nature</i> , 358:761-764 (1992)	
LL	AP	Edington, <i>et al.</i> , Inhibition of Heat Shock (Stress) Protein Induction by Deuterium Oxide and Glycerol: Additional Support for the Abnormal Protein Hypothesis of Induction, <i>Journal of Cellular Physiology</i> , 139:219-228, (1989)	
LL	AQ	Egan, <i>et al.</i> , Differential expression of ORCC and CFTR induced by low temperature in CF airway epithelial cells, <i>American Physiological Society</i> , C243-C251 (1995)	
LL	AR	Finley, <i>et al.</i> , Thermolability of Ubiquitin-Activating Enzyme from the Mammalian Cell Cycle Mutant ts85, <i>Cell</i> , 37:43-55 (1984)	
LL	AS	Gekko, <i>et al.</i> , Mechanism of Protein Stabilization by Glycerol: Preferential Hydration in Glycerol-Water Mixtures, <i>Biochemistry</i> , 20:4667-4676 (1981)	
LL	AT	Gekko, <i>et al.</i> , Thermodynamic and Kinetic Examination of Protein Stabilization by Glycerol, <i>Biochemistry</i> , 20:4677-4686 (1981)	
LL	AU	Gerlisma, <i>et al.</i> , The Effect of Polyhydric and Monohydric Alcohols on the Heat-Induced Reversible Denaturation of Lysozyme and Ribonuclease, <i>Int. J. Peptide Protein Res.</i> , 4:377-383 (1972)	
LL	AV	Ginsberg, <i>et al.</i> , Induction of Growth Arrest by a Temperature-Sensitive p53 Mutant Is Correlated with Increased Nuclear Localization and Decreased Stability of the Protein, <i>Molecular and Cellular Biology</i> , 582-585 (1991)	
LL	AW	Gordon, <i>et al.</i> , Temperature-sensitive Mutations in the Phage P22 Coat Protein Which Interfere with Polypeptide Chain folding, <i>The Journal of Biological Chemistry</i> , 268:9358-9368 (1993)	
LL	AX	Hawthorne, <i>et al.</i> , Osmotic-Remedial Mutants. A New Classification for Nutritional Mutants in Yeast, <i>Genetics</i> , 50:829-839 (1964)	
LL	AY	Henle, <i>et al.</i> , Protection against Heat-induced Cell Killing by Polyols in <i>Vitro</i> , <i>Cancer Research</i> , 43:1624-1627 (1983)	
LL	AZ	Lin, <i>et al.</i> , Modification of Membrane Function, Protein Synthesis, and Heat Killing Effect in Cultured Chinese Hamster Cells by Glycerol and D <sub>2</sub> O, <i>Cancer Research</i> , 44:5776-5784 (1984)	
LL	AAA	Lin, <i>et al.</i> , Why do Some Organisms Use a Urea-Methylamine Mixture as Osmolyte? Thermodynamic Compensation of Urea and Trimethylamine N-Oxide Interactions with Protein, <i>Biochemistry</i> , 33:12695-12701 (1994)	

Examiner  
Signature

*Louise N. Leary*

Date  
Considered

5/02

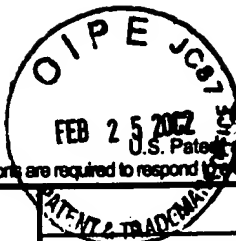
\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.  
SF 1316416 v1

Please type a plus sign (+) inside this box →

+



COPY OF PAPERS  
ORIGINALLY FILED

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

Under the Paperwork Reduction Act of 1995, no persons are required to respond to the collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

5

of

5

Complete If Known

Application Number	09/823,657
Filing Date	March 30, 2001
First Named Inventor	Welch, William J.
Group Art Unit	4623-1627
Examiner Name	Louise N. Leary
Attorney Docket Number	02307E-085021US

CC	ABB	Maroney, <i>et al.</i> , Cloning and characterization of a thermolabile v-src gene for use in reversible transformation of mammalian cells, <i>OncoGene</i> , 7:1207-1214 (1992)	
CC	ACC	Martinez, <i>et al.</i> , Cellular localization and cell cycle regulation by a temperature-sensitive p53 protein, <i>Genes &amp; Development</i> , 5:151-159 (1991)	
CC	ADD	Mitraki, <i>et al.</i> , Global Suppression of Protein Folding Defects and Inclusion Body Formation, <i>Science</i> , 253:54-58 (1991)	
CC	AEE	Russell, Temperature-Sensitive Osmotic Remedial Mutants of Escherichia coli, <i>Journal of Bacteriology</i> , 112:661-665 (1972)	
CC	AFF	Ryan, <i>et al.</i> , Alteration of p53 Conformation and Induction of Apoptosis in a Murine Erythroleukemia Cell Line By Dimethylsulfoxide, <i>Leukemia Research</i> , 18:617-621 (1994)	
CC	AGG	Santoro, <i>et al.</i> , Increased Thermal Stability of Proteins in the Presence of Naturally Occurring Osmolytes, <i>Biochemistry</i> 31:5278-5283 (1992)	
CC	AHH	Sato, <i>et al.</i> , Glycerol Reverses the Misfolding Phenotype of the Most Common Cystic Fibrosis Mutation, <i>Journal of Biological Chemistry</i> , 271:635-638 (1996)	
CC	AII	Schein, Solubility as a Function of Protein Structure and Solvent Components, <i>Bio/Technology</i> , 8:308-317 (1990)	
CC	AJJ	Somero, Protons, osmolytes, and fitness of internal milieu for protein function, <i>American Physiological Society</i> , R197-R213 (1986)	
CC	AKK	Tatzelt, <i>et al.</i> , Chemical chaperones interfere with the formation of scrapie prion protein, <i>The EMBO Journal</i> , 15:6363-6373 (1996)	
CC	ALL	Th'ng, <i>et al.</i> , The FT210 Cell Line Is a Mouse G2 Phase Mutant with a Temperature-Sensitive CDC2 Gene Product, <i>Cell</i> , 63:313-324 (1990)	
CC	AMM	Thomas, <i>et al.</i> , Defective protein folding as a basis of human disease, <i>TIBS</i> 20:456-459 (1995)	
CC	ANN	Welch, <i>et al.</i> , Influence of molecular and chemical chaperones on protein folding, <i>Cell Stress &amp; Chaperones</i> , 1 (2), 109-115 (1996)	
CC	AOO	Yancey, <i>et al.</i> , Living with Water Stress: Evolution of Osmolyte Systems, <i>Science</i> , 217:1214-1222 (1982)	

Examiner  
Signature

*Louise N. Leary*

Date  
Considered

5/02

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.  
SF 1316416 v1